



Sheet 1 of 3

FORM PTO-1419

U.S. Department of Commerce
Patent and Trademark Office

Atty. Docket No.

00-713424

Pat. No.

04,976,617

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant:

Chad A. Mirkin, et al.

Filing Date:

October 12, 2001

Group:

1637

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U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
u	1.	5,830,986	11/03/98	Merrill, et al.	528	332	10/28/96
	2.	5,900,481	05/04/99	Lough, et al.	536	55.3	11/06/96
	3.	6,203,989	03/20/01	Goldberg, et al.	435	6	03/25/99
	4.	6,251,303	06/26/01	Bawendi, et al.	252	301.4R	09/18/98
	5.	6,277,489	08/21/01	Abbott, et al.	428	403	12/04/98
	6.	6,306,610	10/23/01	Bawendi, et al.	435	7.1	09/17/99
	7.	6,361,944	03/26/02	Mirkin, et al.	435	6	06/25/99
	8.	6,365,418	04/02/02	Wagner, et al.	436	518	05/18/00
u	9.	6,417,340	07/09/02	Mirkin, et al.	536	23.1	10/20/00

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes	No
u	10.	WO 93/25709	23 December 1993	PCT				
	11.	WO 98/04740	5 February 1998	PCT				
	12.	WO 98/17317	30 April 1998	PCT				
	13.	WO 99/60169	25 November 1999	PCT				
	14.	WO 00/33079	8 June 2002	PCT				
u	15.	WO 01/00876	4 January 2001	PCT				

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FORM PTO-1449
(Rev. 2-32)U.S. Department of Commerce
Patent and Trademark Office

Atty. Docket No.

Serial No.

00-713:24

09/976,617

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant:

Chad A. Mirkin, et al.

Filing Date:

October 12, 2001

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FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes	No
u	16.	WO 01/51665	19 July 2001	PCT				
	17.	WO 01/73123	4 October 2001	PCT				
	18.	WO 01/86301	15 November 2001	PCT				
	19.	WO 02/04681	17 January 2002	PCT				
	20.	WO 02/18643	7 March 2002	PCT				
	21.	WO 02/36169	10 May 2002	PCT				
	22.	WO 02/46483	13 June 2002	PCT				
u	23.	WO 02/46472	13 June 2002	PCT				

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

u	24.	Letsinger, R., et al., "Chemistry of Oligonucleotide-Gold Nanoparticle Conjugates," <i>Phosphorus, Sulfur and Silicon</i> , Volume 144, p. 359-362 (1999)
u	25.	Letsinger, R., et al., "Use of a Steroid Cyclic Disulfide Anchor in Constructing Gold Nanoparticle-Oligonucleotide Conjugates," <i>Bioconjugate Chem.</i> , p. 289-291 (2000)


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MCDONNELL BOENHLEN
HULBERT & BERGHOFF
200 SOUTH WACKER DRIVE
CHICAGO, ILLINOIS 60606
TELEPHONE (312) 913-3000

FORM PTO-1449 (Rev. 2-2-22) 	U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No. 00-713-24	Serial No. 09/976,617 RECEIVED AUG 23 2003 TECH CENTER 1800 2800	
			INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		
	Applicant: Chad A. Mirkin, et al.			Filing Date: October 12, 2001	Group: 1637

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation
					Yes No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

26.	Li Z., et al., "Multiple thiol-anchor capped DNA-gold nanoparticle conjugates," <i>Nucleic Acids Research</i> , Volume 30, p. 1558-1562 (2002)
27.	Nuzzo R., et al., "Spontaneously Organized Molecular Assemblies. 3. Preparation and Properties of Solution Adsorbed Monolayers of Organic Disulfides on Gold Surfaces," <i>J. Am Chem. Soc.</i> , Volume 109, p. 2358-2368 (1987)
28.	Otsuka, H., et al., "Quantitative and Reversible Lectin-Induced Association of Gold Nanoparticles Modified with D-Lactosyl-D-mercaptopoly(ethylene glycol)," <i>J. Am Chem. Soc.</i> , Volume 123, p. 8226-8230 (2001)
29.	Wuefling, P., et al., "Nanometer Gold Clusters Protected by Surface-Bound Monolayers of Thiolated Poly(ethylene glycol) Polymer Electrolyte," <i>J. Am Chem. Soc.</i> , Volume 120, p. 12696-12697 (1998)

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FORM PTO-1449 (Rev. 2-3-27)	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. 00-713-124	Serial No. 09/976,617
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		
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Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
g	1	4,996,143	02/26/91	Heller, et al.	435	6	04/13/90
	2	5,508,164	04/16/96	Kausch, et al.	435	6	10/29/93
	3	5,922,537	07/13/99	Ewart, et al.	435	6	11/8/96
	4	5,972,615	10/26/99	An, et al.	435	6	31/21/98
	5	6,264,825	07/24/01	Blackburn, et al.	205	777.5	06/23/99
u	6	6,214,560	04/10/01	Yguerabide, et al.	435	7.1	04/18/97

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		Document Number	Date	Country	Class	Subclass	Translation Yes	No
g	7.	WO 94/29484	12/22/94	PCT				
	8.	WO 00/25136	05/04/00	PCT				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

g	9.	Mohanty J., et al., "Pulsed laser excitation of phosphate stabilized silver nanoparticles," <i>Proc. Indian Acad. Sci.</i> , Vol. 112, No. 1, p. 63-72.
	10.	Nicewarner- Peña S., et al., "Hybridization and Enzymatic Extension of Au Nanoparticle-Bound Oligonucleotides," <i>J. Am. Chem. Soc.</i> , Vol. 124, p. 7314-7323 (2002)
	11.	Whitesides G.M., et al., "Soft Lithography in Biology and Biochemistry," <i>Annu. Rev. Biomed. Eng.</i> , p. 335-373 (2001)

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